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(54) Title: METHOD FOR QUANTITATIVE AND SEMI-QUANTITATIVE DETECTION OF L-PHENYLALANINE, L-TYROSINE, L-3, 4-DIHYDROXYPHENYLALANINE AND THEIR CORRESPONDING KETO-ACIDS

(57) Abstract: Method for quantitative and semi-quantitative determination of endogenous amino acids L-phenylalanine, L-tyrosine, L-3, 4-dihydroxyphenylalanine and their corresponding keto-acids, phenylpiruvic acid, 3-hydroxyphenylpyruvic acid and 3, 4-dihydroxyphenylpyruvic acid in biological fluids useful for diagnosis and monitoring of metabolic disorders of said amino acids or diseases involving said amino acids, comprising: a) reaction of phenylpiruvic acid, 3-hydroxyphenylpyruvic acid and 3, 4-dihydroxyphenylpyruvic acid, present as such in biological fluids or coming from the parent endogenous amino acids L-phenylalanine, L-tyrosine, L-3, 4-dihydroxyphenylalanine by deamination, with an organic salt of phenazine derivatives in the presence of at least one alkaline buffer to give colored charge transfer complexes; b) measurement of the absorbance values due to said charge transfer complexes in the wavelength range from 650 to 690 nm and quantification of the keto acids or amino acids concentrations in biological fluids.